1. (Amended) A semiconductor package for enhancing heat dissipation, comprising:

a die having an active surface;

a leadframe, including:

a die pad having a first surface and a second surface, said die being attached to said first surface of the die pad; and

a plurality of leads electrically connected to the active surface of said die, said leads having a surface;

an encapsulating sealing said die and at least a portion of the surface of the leads in said leadframe; and

a heat sink attached to the second surface of said die pad and at least a portion of the surface of leads in said plurality of leads with a thermally conductive and electrically insulating adhesive glue, said heat sink being exposed to ambient atmosphere and not encapsulated in said encapsulant.

8. (Amended) A semiconductor package for enhancing heat dissipation, comprising:

a die having an active surface and a second surface;

a lead frame; including:

a central-hole die pad having a first surface and a second surface, said first surface being attached to said die; and

a plurality of leads electrically connected to the active surface of said die, said leads having a surface;

an encapsulant sealing one portion of the surface of said plurality of leads and said die in said leadframe; and

a heat sink having a T-type structure including a portion extending in a hole of said die pad and attached to said second surface of said die by a thermally conductive and electrically insulating adhesive glue, said heat sink also being attached to the second surface of said die pad and at least another portion of the surface of leads in said plurality of leads with said thermally conductive and electrically insulating adhesive glue, said heat sink being exposed to ambient atmosphere and not encapsulated in said encapsulant.

13. (Amended) The semiconductor package of claim 8, manufactured by steps of:

(a) attaching said die to the first surface of said die pad, and electrically connecting the active surface of said die to the plurality of leads;

(b) adding an encapsulant to an upper mold for sealing said die and one portion of the surface of said plurality of leads;

(c) attaching said heat sink to the second surface of said die, the second surface of said die pad and at least another portion of the surface of leads in said plurality of leads with said thermally conductive and electrically insulating adhesive glue; and

(d) forming and singulating said leadframe.

15. (Amended) A semiconductor package for enhancing heat

dissipation, comprising:

a die having an active surface;

a plurality of leads electrically connected to the active surface of said die, said leads having a surface;

an encapsulant sealing said die and one portion of the surface of said leads; and

a heat sink attached to at least another portion of the surface of leads in said plurality of leads with a thermally conductive and electrically insulating adhesive glue, said heat sink being exposed to ambient atmosphere and not encapsulated in said encapsulant.

20. (Amended) A method of manufacturing a semiconductor package comprising the steps of:

(a) electrically connecting the active surface of a die to a plurality of leads;

(b) adding encapsulant to an upper mold for sealing said die and one portion of the surface of leads in said plurality of leads; and

(c) attaching said heat sink to another portion of the surface of at least some leads in said plurality of leads with thermally conductive and electrically insulating adhesive glue, said heat sink being exposed to ambient atmosphere and not encapsulated in said encapsulant.